REMARKS

Claims 1, 9, 13, 19, and 21 are pending in this application. Claims 1, 9, 13, 19, and 21 are amended by this response. New claims 22 – 36 are added by this response. Support for these amendments are as follows: Claims 1, 9, and 21 (Specification p. 9, l. 28; p. 10, l. 1; p. 17, l. 21; p. 17, Example 1; p. 24, l. 14-17; and p. 30, l. 7 and 14); Claim 13 (Specification p. 34, l. 4 – p. 35, l. 25); Claim 21 (Specification p. 9, l. 28; p. 10, l. 1; p. 24, l. 14-17; p. 30, l. 7 and 14, p. 39, l. 18- p. 40, l. 4; p. 41, l. 20-24). Support for the claims added is as follows: Claim 22 (Specification p. 9, l. 5); Claim 23 (Specification p. 10, l. 9-17); Claim 24 (Specification p. 10, l. 17-27); Claim 25 (Specification p. 20, l. 9-12); Claim 26 (Specification p. 15, l. 26 - p. 16, l. 8); Claim 27 (Specification p.20, l. 9-14); Claim 28 (Specification p. 24, l. 18-20, 24-30; p. 25, l. 1-8); Claim 29 (Specification p. 24, l. 18-20; p. 26, l. 16- 23; p. 26. l. 27 - p. 27, l. 1); Claim 30 (Specification p. 15, l. 26 - p. 16. l. 8; p. 23, l. 25-29; p. 24, l. 18-20, 24-30; p. 25, l. 1-8); Claim 31 (Specification p. 15, l. 26 - p. 16, l. 15), Claim 32 (Specification p. 15, l. 26- p. 16, l. 8, Example 1, Example 2), Claim 33 (Specification p. 31, l. 10-12), Claim 34 (Specification p. 10, l. 9-17), Claim 35 (Specification p. 10, l. 17-27), Claim 36 (Specification p. 15, l. 26-28, p. 20, l. 5-20) . No new matter has been added.

Election/Restriction and Inventorship (Office Action p. 2)

Each of the currently named inventors are still an inventor of at least one claim remaining the in application. Therefore, no amendment to the inventorship is necessary.

Priority/Oath/Declaration Required by 37 C.F.R. 1.33(a) (Office Action p. 3)

A new declaration will follow this response providing the post office addresses of the inventors shortly.

Amendments to the Specification. (Office Action p. 4)

Amendments to the specification are submitted with this response. No new matter has been added.

Claims 1, 9, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. (Office Action p. 4)

Claim 1 has been amended to clarify the synthetic resin molding is constructed within a mold and coupled with the anodic oxidation coating and the synthetic resin molding is intruding the innumerable pores of the coating as shown in amended claim 1. Claim 9 is dependent on claim 1 and claim 13 is dependent on claim 9. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. 112, second paragraph, is respectfully requested.

Claims 1, 9, 13, 19, and 21 are rejected under 102(b) as being anticipated by JP (2002-302795). (Office Action p. 5)

JP2002-302795 discloses a surface treated aluminum material with an anodic film formed on the surface of the aluminum or aluminum alloy. The anodic film has fine pores inside pores of a porous layer to improve adhesion with a laminating resin. The preferable fine pore opening ranges is 50 – 200nm. The fine pores are formed by the second anodic oxidation treatment at a lower voltage than the first anodic oxidation treatment. (Abstract.)

JP2002-302795 does not anticipate the claimed invention. First, JP2002-302795 discloses a thickness of the anodic oxide film of 30-400 nm, more desirably 100-300 nm. Further, the reference states it is easy to produce a crack in the anodic oxide film itself when the thickness exceeds 400 nm. (JP2002-302795 para. 16.) This is unlike the claimed invention that has a depth of the anodic oxidation coating of about 1μm to about 1.5μm. The depth of the claimed

invention is on the order of a micron while the thickness of the reference is on the order of a nanometer. The reference does not disclose a thickness on the order of a micron and therefore does not anticipate the claimed invention.

Further, JP2002-302795 nowhere discloses numerical values for tensile strength. An evaluation of adhesion is provided in paragraph 34 of the reference. However, only arbitrary symbols related to the die length are used to indicate the adhesion. The claimed invention discloses a specific tensile strength in the range of 20Kgf to at least 50 Kgf. Thus, the reference, JP2002-302795 does not anticipate the claimed invention.

Thus, JP2002-302795 does not anticipate the claimed invention wherein the anodic oxidation depth is from about 1μm to 1.5μm and the tensile strength in the range of 20Kgf to at least 50 Kgf. Accordingly, because the cited reference does not disclose every element of the claimed invention, there is no legal anticipation and withdrawal of the rejection under 35 U.S.C. 102(b), is respectfully requested.

Claims 1, 9, 13, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP(2001-172795) in view of Kataoka et al. (U.S. Patent No. 5,866,025). (Office Action p. 7.)

JP 2001-172795 describes a polysilazane solution applied on the surface of an aluminum composite with an acidic oxide film formed on a substrate from aluminum or an aluminum alloy which is then dried and baked to surface treat the composite. (Abstract.) The Office Action states the disclosure of a semiconductor fabrication machine or other techniques can be understood to have a synthetic resin material. (Office Action p. 7-8, JP 2001-172795 paragraph 14.)

JP 2001-172795 does not disclose a synthetic resin molding of the claimed invention that is injection molded into the cavity of the mold to bond with the anodic oxidation coating of the aluminum material. This reference does not teach the diameter of the pores. The resin material of JP 2001-172795 must be inferred.

Kataoka describes a mold for molding a synthetic resin coated with a thick heat insulating layer and a method of molding. The mold comprises a base mold of metal coated with an insulating layer. A large number of pores are formed in the insulating layer. Example 1 describes the diameter of the pores to be on the order of 0.2mm.

It would not have been obvious to an individual with ordinary skill in the art to take the teaching of JP 2001-172795 and combine it with the 0.2mm diameter pores in the insulating layer of Kataoka to arrive at the claimed invention. Combining the two references does not teach or disclose using a mold to bond a synthetic resin molding with an anodic oxidation coating of the aluminum raw material as in the claimed invention. Further, the pore diameter of the claimed invention, 25nm or greater, would not be obvious to one of ordinary skill in the art looking at the dramatically greater pore diameter as disclosed in Kataoka.

Neither reference, alone or in combination, teach or suggest the structural limitations of amended claim 1. The references do not teach or suggest that the anodic oxidation coating have the pore diameter in the range of from about 25 nm to about 90 nm, the depth in the range of about 1μm to 1.5μm and the tensile strength in the range of 20Kgf to at least 50 Kgf.

Further, the purpose of JP2001-172795 is to provide an aluminum composite in which the crack and micropore of the anodic oxide film is closed or filled with the calcinated silica coat originated from polysilazane, resulting in a decreasing gas emission and having the surface characteristic of the desired insulation-proof and corrosion resistance. As shown in Drawing A

of the reference, the conventional aluminum composite has the cracks and micropores 3 produced in the alumite coat 2 on the base 1. According to the invention in Drawing 1(B), the cracks and micropores 3 are closed or filled with the calcinated silica coat originated from polysilazne 4. This is in contrast to the claimed invention to the purpose of the claimed invention that is to provide a composite with is excellent in peel strength by strongly coupling a synthetic resin molding with an aluminum material.

Therefore, neither reference, alone or in combination, teach or suggest all of the limitations of the claimed invention. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a), is respectfully requested.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 04-1105 referencing docket no. 80154(302728).

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Respectfully submitted,

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